

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

PRESSURE SPECIALIST, INC.,

Plaintiff,

VS.

Case No. 18 C 7013

**NEXT GEN MANUFACTURING INC.
and CARL J. BONTA, JR.,**

Defendants.

MEMORANDUM OPINION AND ORDER

MATTHEW F. KENNELLY, District Judge:

In 2017, Pressure Specialist, Inc. sued Next Gen Manufacturing Inc., alleging that Next Gen's paintball air pressure regulator infringed its patent. The parties settled the case in May 2018. Three months later, Pressure Specialist filed the present suit against Next Gen, alleging that a new regulator it was selling infringed the patent. Pressure Specialist later amended the complaint to add Carl J. Bonta, Jr. as a defendant and (still later) to include allegations of patent infringement regarding a third regulator. Each side has filed a motion for summary judgment.

Background

Pressure Specialist manufactures and sells paintball gun parts, including the air pressure regulator that is the subject of U.S. Patent No. 7,059,343 (the '343 patent). An air pressure regulator reduces the pressure of air from a compressed air canister and delivers it to the paintball gun to facilitate firing. As relevant for the purposes of this opinion, claim 1 of the '343 patent recites "a direct acting pressure regulator" with "a

bonnet engageable with the body to define a piston chamber." '343 patent, col. 5 ll. 46–53.

In 2017, Pressure Specialist sued Next Gen alleging that its regulator (the GEN I regulator) infringed the '343 patent. The parties later settled the case. In October 2018, Pressure Specialist sued Next Gen again, this time alleging that its new air pressure regulator (the GEN II regulator) infringed the '343 patent. Pressure Specialist later amended the complaint to add Bonta, the president of Next Gen, as a defendant.

Around the same time Pressure Specialist filed its second suit, the defendants came out with a third regulator (the HAYMKR) and decided to stop selling the GEN II regulator. Because the defendants no longer sold the GEN II regulator, they agreed to stipulate to the entry of a preliminary injunction regarding the device. The parties entered into settlement discussions concerning the GEN II regulator, but these discussions were ultimately unsuccessful. A little less than a year after the settlement talks broke down, Pressure Specialist filed a second amended complaint including the HAYMKR in its patent infringement claims.

On February 9, 2021, this Court issued an order construing certain terms in claim 1 of the '343 patent. The Court defined the term "bonnet" as follows: "[a] bonnet' is a structure of one or more pieces that connects with the body so that a seal is formed and that delineates a chamber or space for the piston, and which has a regulated outlet for gas." Dkt. no. 105 at 11. Both sides have filed motions for summary judgment on the issue of infringement. The defendants argue that neither the GEN II regulator nor the HAYMKR infringes the '343 patent. Pressure Specialist argues that the Court should find that the GEN II regulator infringes the patent.

Discussion

To succeed on a motion for summary judgment, the movant must show "that there is no genuine dispute as to any material fact." Fed. R. Civ. P. 56(a). There is a genuine issue of material fact if "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Hanover Ins. Co. v. N. Bldg. Co.*, 751 F.3d 788, 791 (7th Cir. 2014) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). When parties file cross-motions for summary judgment, courts "construe all inferences in favor of the party against whom the motion under consideration is made." *Cremation Soc'y of Ill., Inc. v. Int'l Bhd. of Teamsters Local 727*, 869 F.3d 610, 616 (7th Cir. 2017) (citation omitted).

A. Pressure Specialist's cross-motion for partial summary judgment

Pressure Specialist asks the Court to grant summary judgment on the question of infringement regarding the defendants' GEN II regulator. It contends that the defendants "made a series of binding judicial admissions that the GEN II infringe[s] and that they are liable for the claims of GEN II infringement." Pl.'s Resp. & Mot. at 19. A judicial admission is, "in effect, a waiver." *Higgins v. Mississippi*, 217 F.3d 951, 954 (7th Cir. 2000). It is a "formal concession[] in the pleadings" that has "the effect of withdrawing a fact from contention." *Solon v. Gary Cmty. Sch. Corp.*, 180 F.3d 844, 858 (7th Cir. 1999). Admissions in an answer to a complaint may constitute a judicial admission. See *Crest Hill Land Dev., LLC v. City of Joliet*, 396 F.3d 801, 805 (7th Cir. 2005). Pressure Specialist contends that the defendants cannot now deny that their GEN II device infringes on the '343 patent because they previously made judicial admissions conceding infringement.

In support, Pressure Specialist cites several of the defendants' filings. It first points to the defendants' answers to the original complaint and the amended complaint, in which they admitted Pressure Specialist's allegations of infringement regarding the GEN II regulator. It also references statements made in the defendants' answer to the second amended complaint. For example, in their answer to the second amended complaint, the defendants state: "Defendants deny [infringement of the '343 patent], but concede liability regarding the Gen II device." Answer to Second Am. Compl. ¶ 48. They also state: "However, defendants concede liability concerning the Powerhouse Gen II regulator, which was the subject matter of plaintiff's First Amended Complaint, but demand strict proof of any claimed damages." *Id.* ¶ 17. Pressure Specialist also cites a statement made in the defendants' motion to strike: "As the plaintiff notes on multiple occasions, regarding the GEN II and HK Army regulators, the defendants have conceded liability." Dkt. no. 9 at 2.

The defendants dispute that these statements constitute judicial admissions. First, the defendants argue that the statements were made solely for settlement purposes; they contend that they admitted to past infringement by the GEN II regulator for the sole purpose of facilitating a quick settlement of the lawsuit. Second, the defendants argue that the statements in their earlier pleadings are not binding because they were superseded by Pressure Specialist's second amended complaint. Third, they argue that the statements are not deliberate, clear, and unambiguous as required to constitute a judicial admission. None of these arguments are persuasive.

The first two arguments miss the mark because the defendants repeated their admissions in pleadings filed after the settlement talks broke down and after Pressure

Specialist filed its second amended complaint. By the time the defendants filed their answer to the second amended complaint, the parties were no longer pursuing settlement as an option. Thus, even if the Court overruled Pressure Specialist's judicial admission contention regarding statements made before the filing of the second amended complaint, this would leave intact the defendants' statements in the answer to the second amended complaint and in their subsequent motion to strike. Contrary to the defendants' contentions, these statements are deliberate, clear, and unambiguous and thus constitute judicial admissions. For this reason, Pressure Specialist is entitled to summary judgment on liability with respect to the GEN II regulator.

B. The defendants' motion for summary judgment

In the second amended complaint, Pressure Specialist alleges both direct infringement and infringement based on the doctrine of equivalents. The defendants seek summary judgment on both contentions. For the reasons below, the Court denies the defendants' motion.

1. Direct infringement

Claim 1 of the '343 patent recites "a direct acting pressure regulator" with "a bonnet engageable with the body to define a piston chamber." '343 patent, col. 5 ll. 46–53. In its claim construction order dated February 9, 2021, the Court adopted the following construction: "'A bonnet' is a structure of one or more pieces that *connects with the body so that a seal is formed* and that delineates a chamber or space for the piston, and which has a regulated outlet for gas." Dkt. no. 105 at 11 (emphasis added). The parties dispute the meaning of the emphasized portion.

The defendants contend that the word "seal" in this construction indicates that

the bonnet must connect with the body to create a seal that is gas impermeable. They argue that the HAYMKR does not infringe on claim 1 of the '343 patent because it does not have such a structure. In contrast, Pressure Specialist argues that a bonnet does not have to create a seal that is gas impermeable; rather, the bonnet need only engage with the body in such a way as to become "assembled as a unit." Pl.'s Resp. & Mot. at 10. Because the HAYMKR contains pieces that screw onto the body of the regulator to form a single unit, Pressure Specialist contends, the HAYMKR infringes claim 1 of the patent.

The patent states that "the body 14 and bonnet 18 threadedly engage one another to seal the regulator 10 as a unit." '343 patent, col. 3 ll. 31–34. When these pieces are screwed together, the preferred embodiment has a high-pressure piston region and a low-pressure spring region. *Id.* at col. 4, ll. 10–15. In the high-pressure region, devices called O-rings prevent gas from flowing out of the high-pressure region until the trigger is pulled. *Id.* at col. 4, ll. 5–9. The low-pressure region, however, is formed by the connection between the body and the bonnet. Sullivan Dep. at 20 (confirming that the bonnet and body "join around the area of the spring chamber"). Because the "seal" formed is not airtight, gas can pass through the metallic threads in the bonnet. *Id.* at 20–21 (explaining that there is "some transference of one atmosphere on the outside to the atmosphere in the spring cavity area"). This escape of ambient air out of the low-pressure region has no impact on the operation of the regulator. *Id.* at 16.

If adopted, the defendants' reading of the claim and the Court's claim

construction ruling would exclude the preferred embodiment of the patent.¹ As previously described, the bonnet and body of the preferred embodiment do not engage one another to form a seal that is gas impermeable. Thus, under the defendants' interpretation of the term, the preferred embodiment would fall outside claim 1.

"A claim construction that excludes the preferred embodiment is highly disfavored." *Duncan Parking Techs., Inc. v. IPS Grp., Inc.*, 914 F.3d 1347, 1364 (Fed. Cir. 2019). "Such an interpretation is rarely, if ever, correct and would require highly persuasive evidentiary support" *Vitronics Corp. v. Conception, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996).

The defendants fail to provide anything like the "highly persuasive evidentiary support" that is needed to support their "disfavored" interpretation. First, the defendants argue that the '343 patent consistently uses the word "seal" to mean a gas-impermeable seal. Not so. In column 3, lines 31–34, the patent states that the bonnet and body of the preferred embodiment "threadedly engage one another to seal the regulator." As explained above, this seal is not gas impermeable, so it is not true that the patent only uses the word "seal" to describe gas-impermeable seals. See Sullivan Dep. at 20–21.

The defendants also point to the deposition testimony of Pressure Specialist's expert witness, Brian Sullivan, to argue that a person with ordinary skill in the art would understand the word "seal" to mean to prevent the escape of gas. But the defendants fail to recognize the context in which Sullivan made these statements. Referring to

¹ The only response the defendants make to this argument is that it is "irrelevant and immaterial." Defs.' Reply at 9. They have thus effectively conceded that their interpretation excludes the preferred embodiment. *Bonte v. U.S. Bank*, 624 F.3d 461, 466 (7th Cir. 2010) ("Failure to respond to an argument . . . results in waiver.").

specific lines in the patent, counsel asked Sullivan if the word "seal" meant a gas-impermeable seal. In those instances, the seals referenced were gas-impermeable seals, for example, the seal created by the O-rings. This does not tend to show that a person with ordinary skill in the art would understand that the word "seal" always means a seal that is gas impermeable. Notably, counsel did not ask Sullivan about the line in the '343 patent in question: "the body 14 and bonnet 18 threadedly engage one another to seal the regulator 10 as a unit." The Court also notes that in his report, Sullivan suggests that a seal does not have to be gas impermeable. Sullivan Rep. ¶ 44.

The Court finds that there is a genuine dispute regarding whether the HAYMKR possesses a bonnet, or as the Court defined, "a structure of one or more pieces that connects with the body so that a seal is formed." The HAYMKR comprises a body and two structures—a cartridge and a collar—that are joined to the body. Although the cartridge/collar assembly of the HAYMKR, when joined to the body, does not create a seal that is gas impermeable, Sullivan stated that its parts can be threaded together "so as to prevent the assembly from coming apart." *Id.* ¶ 47. This is sufficient to create a genuine dispute regarding whether the HAYMKR possesses a bonnet as the Court has construed the term.

2. Doctrine of equivalents

Even without literal infringement, a product can still be found to infringe "if there is 'equivalence' between the elements of the accused product or process and the claimed elements of the patented invention." *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997). "A component in an accused product or process may be equivalent to a claim element if the two are insubstantially different with respect

to the 'role played by [the] element in the context of the specific patent claim." *Eli Lilly & Co. v. Hospira, Inc.*, 933 F.3d 1320, 1335 (Fed. Cir. 2019) (quoting *Warner-Jenkinson*, 520 U.S. at 39–40). Significant differences are those involving "the function each serves, the way in which each works, and the result each obtains." *Id.*

The defendants point to two differences between the HAYMARK and the patent claim that they contend are significant and preclude a finding of infringement: (1) the rotational adjustability of the HAYMKR cartridge/collar assembly and (2) the vented piston chamber of the HAYMKR. The Court finds that there are genuine factual disputes precluding entry of summary judgment in favor of Pressure Specialist.

First, regarding the HAYMKR's rotational adjustability, Pressure Specialist argues that because the rotation feature was present in other patents, including one of its own patents, the difference is not substantial. The parties genuinely dispute, however, whether this feature was previously known. Pressure Specialist relies on Sullivan's report, which states that the rotation feature is found in U.S. Patent No. 6,539,969 and in Pressure Specialist's Ninja Pro V2 regulator. The defendants challenge Pressure Specialist and Sullivan's contentions, stating that they "provide no analysis or discussion concerning what particular aspect of rotational adjustability were previously known, nor was the '969 patent included and discussed or analyzed." Defs.' Reply at 14. Although these criticisms may undermine the persuasiveness of Sullivan's statements, they do not foreclose the possibility that a reasonable factfinder could conclude, on the basis of Sullivan's report, that the rotation feature was previously known and thus not a substantial difference.

In addition, the parties dispute whether rotational adjustability is significant in the

context of the patent claim at issue. Pressure Specialist contends that the rotation feature is not a significant difference because the "patent claim includes no language regarding rotation or nonrotation of the bonnet." Pl.'s Resp. & Mot. at 18. In contrast, the defendants argue that rotational adjustability is a significant difference because the device described in the patent claim is "entirely non-adjustable," and such adjustability allows greater accuracy, comfort, and ease of use for the paintball gun operator. Defs.' Reply at 14; Defs.' Mot. at 10–11. Determining whether the HAYMKR's rotational ability improves upon the patent claim's bonnet so significantly as to constitute a substantial difference requires factual determinations that must be made after trial.

With respect to the defendants' second claimed substantial difference, the parties genuinely dispute whether the HAYMKR has a vented piston chamber that is different—let alone substantially different—from that described in the patent claim. Pressure Specialist contends that the preferred embodiment of the '343 patent has the same two-part chamber structure as the HAYMKR. Like the preferred embodiment, Pressure Specialist contends, the HAYMKR contains both a high-pressure chamber that has an airtight seal created by O-rings and a low-pressure chamber that allows ambient air to travel through the threads of the bonnet. These chambers serve the exact same functions in the '343 patent and the HAYMKR: the high-pressure chamber contains the piston and facilitates the transfer of pressurized air into the paintball gun, whereas, the low-pressure chamber contains the piston spring. The Court concludes that there is a genuine dispute regarding whether the HAYMKR and the '343 patent contain different vented chambers.

Pressure Specialist also contends that, even if the HAYMKR's chambers are

different from those described in the patent claim, the vented chamber is not a substantial difference because it does not affect the performance of the regulator. In support, Pressure Specialist cites Sullivan's deposition testimony, in which he states "whatever small amount of pressure differential there might be in [the low-pressure chamber] has no effect on the regulator or these pressures whatsoever." Sullivan Dep. at 16. In contrast, the defendants cite Bonta's declaration, in which he states that a vented spring chamber prevents dampening of the piston's movement by trapped air. This, according to the defendants, "allows greater efficiency and accuracy in the pressure of air ultimately delivered to the paintball gun." Defs.' Mot. at 14. The Court concludes that there is a genuine dispute concerning whether the HAYMKR's vented chamber affects the performance of the regulator, thus constituting a substantial difference.

Because of these factual disputes, the Court denies the defendants' motion for summary judgment.

Conclusion

For the foregoing reasons, the Court grants Pressure Specialist's cross-motion for summary judgment [dkt. no. 137] and denies the defendants' motion for summary judgment [dkt. no. 127]. The case is set for a telephonic status hearing on February 11, 2022 at 9:20 a.m., for the purpose of setting a trial date. The following call-in number will be used: 888-684-8852, access code 746-1053. Counsel should wait for the case to be called before announcing themselves.

Date: February 6, 2022


MATTHEW F. KENNELLY
United States District Judge